

Furlong, K., Acevedo, T., Arias, J. and Patiño, C. 2018.
Rethinking water corporatisation: A 'negotiation space'
for public and private interests, Colombia (1910-2000).
Water Alternatives 11(1): 187-208



Rethinking Water Corporatisation: A ‘Negotiation Space’ for Public and Private Interests, Colombia (1910-2000)

Kathryn Furlong

Department of Geography, Université de Montréal, Montréal, Quebec, Canada; kathryn.furlong@umontreal.ca

Tatiana Acevedo Guerrero

UNESCO-IHE Delft Institute for Water Education, Delft, the Netherlands; t.acevedo@un-ihe.org

Jeimy Arias

Department of Geography, Université de Montréal, Montréal, Quebec, Canada;
jeimy.alejandra.arias.castaa@umontreal.ca

Camila Patiño Sanchez

Department of Geography, Université de Montréal, Montréal, Quebec, Canada; c.patino.sanchez@umontreal.ca

ABSTRACT: As part of neoliberal reforms to public service delivery, the corporatisation of water supply has been of increasing concern since the late 1990s. Typically, both promoters and detractors frame it within neoliberal theory: it is the next best (or worst) thing to privatisation, enabling the ostensibly independent, commercial and technical management of utilities. In Colombia, however, city-owned water supply corporations are far from new. They were adopted across the country’s main cities at the beginning of the 20th century. Colombia’s century-long experience with corporatised water supply is instructive. The case reveals a model that emerged in the context of challenges common to Southern cities, rather than as a 'solution' imposed from the North, the deep inter-linkages between public and private sectors in the evolution of publicly owned corporations and thus the limited nature of utility autonomy under corporatisation. In sum, corporatisation – imagined as a technology for the 'government of government' – cannot escape the shifting social realities in which it is immersed. It therefore emerges as a technology not for the excising of government authority but for the negotiation of public and private interests in (and influence over) utility services in contexts of relatively limited government autonomy from the private sector.

KEYWORDS: Public utilities, public and private interests, water supply, corporatisation, cross-subsidisation, neoliberalisation, Colombia

INTRODUCTION

Corporatisation has increased significantly since the 1990s in both OECD and non-OECD countries, touching services from health care to education, ports, bussing, water and electricity. While government-owned corporations have existed across a variety of countries since the 19th century (McDonald, 2016), their recent levels of commercialisation are said to set them apart from earlier entities (Christensen and Pallesen, 2001; Furlong, 2016; McDonald, 2014). Corporatisation involves the conversion of government-operated utilities to arm’s-length corporations of public or mixed public-private ownership.

Recent corporatisation is widely seen as a tool of neoliberalisation. Broadly speaking, advocates argue that it implies the application of commercial management principles to public sector administration, leading to improved performance and reduced costs (See Walsh, 1995). Such arguments are widely critiqued by researchers in public administration, political science and geography (Walsh, 1995; Pollitt and Bouckaert, 2000). What analyses of corporatisation on both sides of the debate have in common, however, is that they tend to uphold the notion that a corporate organisational structure can engender a range of outcomes, such as autonomy from local government and a strict commercial focus. What they tend to dispute are the effects of these management outcomes on service quality and service access (e.g. Hall and Lobina, 2010; McDonald and Ruiters, 2012a).

In light of these debates, the Colombian experience with utility corporatisation is instructive. It dates back to the 1910s in Colombia's major cities, i.e. more than half a century prior to its popularisation under neoliberalism. This longer historical engagement reveals a number of things. First, the pursuit of corporatisation can be directly related to challenges common to service delivery in Southern cities, as opposed to a reflection of an ideology imported (or imposed) from the North. Second, it shows that the autonomy sought through corporatisation is something that is continuously negotiated rather than an inherent feature of the model. Here, rather than an exclusion of local government, both public and private sectors remain deeply engaged in service provision. This means that the assumed bifurcation between commercial and social goals, between corporate utilities and excluded governments, can be much more fluid in practice.

Instead of outcomes being derived from incentives and constraints built into the corporate model, the way corporatisation works is a product of both time and place. It evolves in similar but contrasting ways in different cities and periods, depending on the relative power of the public and private sectors, the level of collusion or contestation between them and the influence of actors at other scales. In fact, as opposed to a vehicle for commercialisation or a tool to neutralise local government influence, rendering the political technical, corporatisation can be better understood as a technology for the negotiation of public and private interests in and influence over utility services in contexts of relatively limited government autonomy from the private sector. To demonstrate these points this article presents a case study of water utility corporatisation in Colombia's two largest cities, Bogotá and Medellín, over the course of the 20th century. In particular, we focus on the municipalisation and corporatisation processes at the beginning of the century, the origins of what would become a national cross-subsidisation programme mid-century, and efforts by the central government to restrict cross-subsidisation and privatise municipal corporations in the 1990s.

METHODOLOGY

The analysis is based on data contained in a legislative database compiled by the authors as well as complementary data from interviews, archival research and newspaper articles. The legislative database comprises the laws, decrees, resolutions and rulings of the constitutional court related to public utilities from 1909 to 2012. It was compiled using Colombia's Official Journal and the archives of the Constitutional Court. They include 391 national regulations, 219 decisions of the Constitutional Court and 113 documents issued by CONPES¹ – Colombia's highest planning authority. At the urban scale, the database includes the regulations and accords for Bogotá, Medellín, Cali and Barranquilla and their respective departments. A total of 611 Municipal Accords and Departmental Ordinances are included. This data was systematically analysed to identify key themes (See Acevedo Guerrero, Arias and Furlong, 2015). Here, only the themes of corporatisation, cross-subsidisation and

¹ Consejo Nacional de Política Económica y Social (National Council for Economic and Social Policy), CONPES.

commercialisation are treated. As such, the majority of the information available in the database does not feature in this paper. The above data is contextualised using newspaper articles published during the period as well as archival material. In particular, we draw on *El Tiempo* and *El Espectador*, Colombia's two most important national dailies, as well as *El Colombiano* and *El Mundo*, from Medellín. For the privatisation debates, interview data as well as city council minutes and reports are used.

RETHINKING CORPORATISATION

Under neoliberalisation, the privatisation of water supply has been of significant concern in public debate and academic study. And, while privatisation is the logical consequence of the application of neoliberal theories, it has been limited in practice not only for water supply (Budds and McGranahan, 2003; Furlong, 2010) but across public sector services (Walsh, 1995; Warner and Hefetz, 2012). In response, public corporations have been advanced as a less controversial alternative that meets all the 'business' criteria of privatisation while remaining public. As a result, corporatisation is on the rise in many countries. The phenomenon is widespread throughout Europe and the OECD (Hoorens, Verdier and Marinez, 2004) and has been increasing in the global South as a strategy to "modernise emerging economies" (Christensen and Pallesen, 2001: 283). Water utilities have not been immune to this trend. Since the late 1990s the corporatisation of urban water utilities has been witnessed in cities in Africa, Europe and North and South America (e.g. Grossi and Reichard, 2008; Schwartz, 2008; Krause, 2009; McDonald and Ruiters, 2012b).

In the most basic sense, a publicly owned corporation refers to an organisation that is regulated by corporate law but whose sole or majority shareholders are public (i.e. local or senior governments). In the case of water supply corporatisation new corporations are generally municipally owned. Throughout most of the 20th century such entities existed primarily at the state level for the delivery of government services of a 'commercial' character (Wettenhall, 2001). Under neoliberalism the social focus and public character of these entities have been weakened in favour of a private sector ethos focused on 'market profitability' (Thynne, 1994). In fact, their character is said to have changed to such an extent that they should be approached as a wholly new invention (Sheil, 2000).

Those who advocate the corporatisation of urban utilities are primarily concerned with making these utilities autonomous from local governments. Following the logic of state failure, local governments are said to 'politicise' service delivery (e.g. Paquet, 1997; Wilkins, 2002). This, it is argued, translates into insufficient revenue collection and underinvestment in infrastructure. By making utilities independent from local governments the 'politicisation of water' is said to be avoided, ensuring 'business-like management' and 'efficiency' (Warner and Hefetz, 2008; Cruz et al., 2014). Corporatisation is thereby expected to create a governance environment amenable to the application of neoliberal management principles, including such things as full cost recovery, volumetric metering, consumption-based billing, service suspension and market-based performance evaluation (Bakker, 2007: 435). Sheil (2000: 42) summarises the mandate as "reduc[ing] the purpose of public authorities to earning money and reducing governments to appointing directors". In a variety of cases, from France to South Africa, from Australia to Bolivia, corporatisation has resulted in rising utility bills, user debt, service suspensions and reduced access for the poor (Assies, 2003; Smith, 2004; McInnes, 2005; Sheil, 2000; Tsanga Tabi, 2006).

Therefore, corporatisation can be understood as a 'technology' of government under neoliberalisation. Dean (1999: 149) refers to "advanced liberal government", a key feature of which is "reflexive government" or the "government of government", whereby measures normally applied by the state to govern populations are turned toward the agencies of government itself. Here, the supposed problems of "inefficiency, bureaucracy, rigidity, unaccountability and dependency" attributed to the welfare state are to be excised through technologies that seek to reproduce mechanisms of private-sector or market control (Dean, 1999: 172-173). To this end, expertise is detached from "the apparatuses of political rule" and relocated within market-styled arrangements (Rose, 1996: 41). These

perspectives follow what Hetherington (2011: 7) refers to as a "long line of work" following Foucault – whereby "the underlying strategy of governance and development is to take political problems and render them technical and bureaucratic". The apparent difference under neoliberalism is that they are not simply deployed by the state upon the population (e.g. Scott, 1998) but turned toward the regulation of government.

According to Miller and Rose (2008), to understand the essence of governing – as the conduct of conduct – one should begin with how the thing to be governed was first rendered problematic. This constitutes a process of 'problematization', whereby the existence of the problem itself is not given but a constructed perception in which the problem and the solution – i.e. the intervention – are intrinsic to one another and therefore appear compatible, for "they have been made so that they fit each other" (Miller and Rose, 2008: 15). This is what renders the problematization in question governmental and technical: the simultaneous capacity to intervene, to 'solve'. For this process to occur two things must be defined: the rationality – a "way of representing and knowing a phenomenon" and the technology – "a way of acting upon it so as to transform it" (Miller and Rose, 2008: 15). For corporatization as 'technology', the rationality is the problematization of apparent government inefficiency and corruption. It is a government of government.

What is interesting in the Colombian case, however, is that this problematization, while associated with neoliberalism, does not emerge under neoliberalism but at the beginning of the 20th century. In Bogotá, for example, corporatization was forced upon its water utility in the 1910s by the city's lack of resources and consequent dependence on banks for municipalization. The creditors employed the seemingly late 20th century rationality of government inefficiency to justify the need for corporatization. A second noteworthy element arising from the Colombian case is that the technology of corporatization has not and does not function to 'solve' the problem of 'government interference' in service delivery as per the associated rationality. In fact, while it has been continuously purported that corporatization will achieve the elimination of 'politics' in favour of technical management, in Colombia this goal has been so elusive as to approach rhetoric. If we think of the technology of corporatization in combination with insights from science and technology studies (STS), however, the inability to fix the technology to particular outcomes appears quite normal. For scholars of STS, technologies 'mirror our societies': they are embedded in heterogeneous and complex social relations whose tensions and conflicts they reproduce (Bijker and Law, 1992: 3). As such, a technology's relationship to society cannot be stabilised without the stabilisation of "the heterogeneous social relations in which it is implicated" (Bijker and Law, 1992: 10). A technology is therefore better understood as a "negotiation space" (Law and Bijker, 1992: 305) than as an artefact from which stable and known outcomes can be expected. This is not only true of technologies such as a pump (de Laet and Mol, 2000) but also those like the law (Latour, 2010).

It is argued here that commercial frameworks for corporatization rationalities are insufficient to grasp fully the implications of the technology of corporatization for public service delivery. This follows recent work in political ecology and Southern urbanism. With specific concern for neoliberal interpretations of urban service delivery, Parnell and Robinson (2012) argue that for Southern cities the impact of neoliberalism must be qualified. Instead of a full-scale distortion of urban governance, neoliberalism is but one of a variety of processes reforming Southern cities and not always the most important. As such, the neoliberal frame offers only limited explanatory capacity in relation to recent policy developments, overlooking the fact that the state continues to play an important role in urban development, including urban services (Lawhon, Ernstson and Silver, 2014). In a study of the corporatization of Johannesburg Water, for example, Smith (2006) shows that the state remains a key actor in water supply despite the goal of corporate autonomy and independence from government. Similarly, a comparison of the growth of publicly owned utility corporations in Colombia and the Netherlands demonstrates the importance of accounting for social reproduction in the evolution of their projects in other localities (Furlong, 2015).

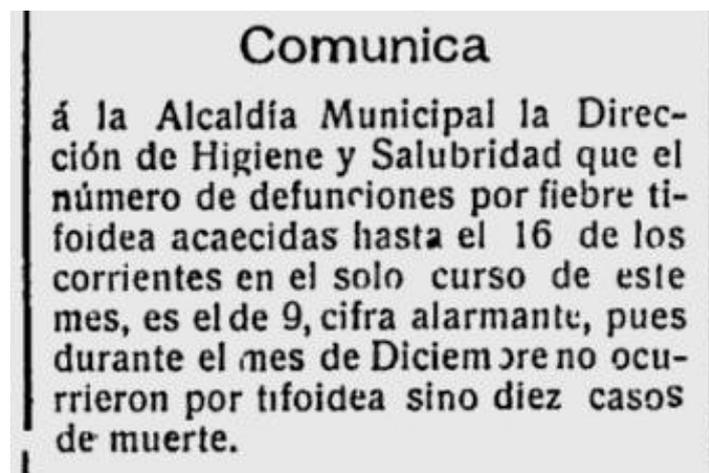
Adding to that work, this research unearths the longer historical antecedents of utility corporatisation. The Colombian case indicates that the meaning of corporatisation evolves through a constantly shifting friction between the interests of a range of public and private actors in the context of challenges at multiple scales. This throws into question the rationality of "independence from government" as both a goal and an effect of corporatisation. Over the course of the 20th century, despite corporatisation, local governments retained significant influence over service delivery. Yet they were not the only ones. Private actors also exercised consistent and significant 'interference'. And while private actors may have sometimes held local 'politics' in check, local governments have also used their authority to protect and promote wider access to essential services against the interests (or politics) of industrial and commercial groups. As such, 'independence from private sector groups' could constitute a rationale for corporatisation on a par with 'independence from government'.

FRICION: DIVERSE INTERESTS IN EVOLVING CORPORATISATION

Who defines corporatisation? From municipalisation to full legal autonomy

Until the 1910s private companies owned and operated piped-water infrastructure in Colombia's major cities. As in Europe and North America under private management service quality and coverage were poor. An editorial published in 1912 in the *Gaceta Republicana*, then a major Bogotá daily, characterised the water as 'death', with the city itself dying of "typhus, dysentery and other epidemics caused by dirty water" (*Gaceta Republicana*, 1912). That year the city's Directorate of Health and Hygiene reported an "alarming" nine typhoid deaths in the first 16 days of January (Figure 1). Cholera broke out that same month, taking 115 lives by August (*El Tiempo*, 1912c). In 1912 the rate of death by typhoid in Bogotá was approximately 17 times that of US cities, reaching nearly 179 per 100,000 (Gallini et al., 2014). In response, local government, industry and the press promoted the municipalisation of water supply (EAAB, 2003a; *El Tiempo*, 1911a).

Figure 1. Notice from the Directorate of Public Health and Hygiene, Bogotá, 18 January 1912.



Source: (*El Tiempo*, 1912a). The notice reads: "The Directorate of Public Health and Hygiene informs the City Hall that nine deaths due to typhoid fever have been registered in the first 16 days of January. Nine is an alarming figure, since during the entire month of December we had ten cases of death due to typhoid fever".

Bogotá began municipalisation in 1910. Three years later the central government gave all Colombian municipalities the legal authority to assume control of (or municipalise) water and electricity networks under Law 4 of 1913. The process, however, was not easy. Even though Bogotá's city council affirmed

the decision to rescind the existing private contract on 31 March 1911 (El Tiempo, 1911b), the process took another three years. Like other Colombian cities, Bogotá lacked the financial resources to purchase the utilities from their private owners. To resolve the situation, in 1911 the President of Colombia assumed the role of arbitrator and set the price at 300,000 Colombian pesos (hereafter CP\$) 'oro' (US\$7.37 million – all monetary conversions in this article are in 2013 dollars unless otherwise stated)² (Giraldo, 1911). In 1912 the city approved the contract, but in addition to the CP\$300,000, they were required to assume responsibility for all debts owed to the private company and to cut services to consumers in arrears (El Tiempo, 1912d).

The price set by Colombia's president was unaffordable. In 1912 Bogotá's city council requested urgent assistance from the National Congress as the municipality's revenues (from taxes and other income) were lower than its expenses, making investments impossible (Consejo de Bogotá, 1912). The city sought loans from banks in Britain and France, but interference on the part of the central government to obtain loans for its own projects undermined the city's efforts (El Tiempo, 1912b). This also affected Medellín, which lost a £450,000 international loan in 1912 (US\$54.2 million) (El Colombiano, 1912). Further, with the start of the First World War in 1914, loans from Europe became impossible (García Estrada, 2000). In 1913 the central government agreed to provide a CP\$100,000 loan to Bogotá (US\$2.3 million) to purchase the water infrastructure.³ This being less than a third of the amount required, the City turned to private domestic banks. In 1914 the utility was granted permission to obtain a loan of CP\$320,000 (US\$7.13 million) at 12% interest from the *Banco Hipotecario de Colombia*.⁴ This enabled the city to finalise the municipalisation process, putting a premature end to the 70-year private concession established in 1886 (Jiménez and Valderrama, 2004).

As a part of the loan agreement the City of Bogotá was required to cede control of the utility to the lending banks and to retain the corporate structure that it had had as a private entity. Accord 15 of 1914 stipulated that the water utility be managed by a "completely independent board", composed of a representative of each of the two lending banks and one member of city council until the repayment of the loan.⁵ The banks argued that their control was necessary to ensure loan repayment given widespread local corruption (Buitrago Mora, 1978). By 1925 Bogotá's water utility had repaid its loans and improved coverage. Yet, in contravention of the 1914 agreement, the banks did not relinquish their control (El Nuevo Tiempo, 1925). Rather, the utility's corporate structure was reinforced through Accord 57 of 1924, which brought water supply, the tramway and municipally owned power plants under a single corporate entity called the *Empresas Municipales* (the municipal companies).

Akin to charges of 'state failure' that would emerge in the 1970s and 1980s, reducing the influence of local government was given as a central reason for requiring a corporate structure with an independent management board in Bogotá in 1914. Local corruption combined with a lack of government resources served to increase the dependence of utilities on private banks, and these insisted on establishing authority over the newly municipalised entities. Still, this did not ensure the expected autonomous and technocratic utility management. Despite initial improvements and continued bank control, by 1929 the corporatised utility's performance had declined significantly. New debts had accumulated and residential service interruptions were common (El Tiempo, 1929a). This was blamed on local government interference and the 'politicisation' of water. Liberals accused Conservatives of using the utility as their 'bureaucratic booty' to buy electoral favour (El Espectador,

² All monetary conversions in this article are based on historical US dollar rates for the Colombian peso published by Urrutia and Arrubla (1970), Capítulo IV, Tasas de cambio del peso colombiano en terminos de dolares corrientes 1895-1950, Tables IV y V-A. These were then converted to 2013 values using real price measures according to www.measuringworth.com.

³ Law 97 of 1913, Article 6.

⁴ Bogotá Accord 15 of 1914.

⁵ Ibid. Article 11.

1929a). There were organised refusals to pay water bills and public demonstrations against the misappropriation of funds and the miserable condition of the service (El Tiempo, 1929b, d, c). This was a challenging time throughout Colombia, which had seen major international investments and improvements in infrastructure throughout the 1920s and was hit hard by the financial crash of 1929 (LeGrand, 1986; Henderson, 2001). Bogotá was run by ten different mayors in the two years between 1929 and 1931.

In 1929, following several days of protest, the government appointed a new general manager of the *Empresas Municipales*, Alfonso Araújo. One of his first acts was to appeal for additional loans. These were substantial and helped to further consolidate bank authority over the utility. The Banco Hipotecario de Colombia, the Banco de Bogotá and the Banco de Colombia demanded a more prominent role in the management of the utility, citing the need to protect their loans against corruption and mismanagement. In 1929 the city signed a co-management agreement with the three lending banks, again giving them a dominant position on the board (three of five members). This board was given full autonomy to "organise, administer, and improve" the utility, including appointing the general manager and setting tariffs, with the approval of the mayor and city council.⁶ Akin to contemporary thinking, such board control was expected to ensure 'business-like' management and thereby "reduce the overhead and increase the elasticity and efficiency of all operations" (El Espectador, 1929a). Recognising the new power of the banks, El Espectador ran the headline: "Municipal enterprises handed over to the banks" (El Espectador, 1929b). This power-sharing arrangement remained in place for 26 years, until 1955, when new legislation was enacted creating the possibility for autonomous public authority beyond the country's three levels of government. This legislation – driven by private interests in Medellín – stimulated the reorganisation of utility corporations across Colombia.

In Medellín, as in Bogotá, public protest was a significant factor in the drive towards municipalisation. However, what took precedence, according to a range of observers, was the goal of building a modern industrial city and the essential role of reliable utility services – particularly water – for industry and its workers (Livardo Ospina, 1966; Botero Herrera, 1996). At the time, working class and 'popular' neighbourhoods had public standpipes and wealthier neighbourhoods had privately owned networks of clay pipes that were highly vulnerable to leakage and sewer infiltration. Epidemics of dysentery and typhoid were rampant (El Espectador, 1913a, d), leading to calls for a city-wide, iron piped-water network (El Espectador, 1913c) and generating harsh critiques of local politicians (El Espectador, 1913b).

The city began municipalising water supply as early as 1901 by restricting the sale of water and declaring it – and its leasing – to be the property of the district (García Estrada, 2000; Márquez V. and Santa Z.; 2013). Over the course of the decade that followed the municipality worked to become the sole proprietor of the city's waters, culminating in full municipalisation in 1913. Accord 127 of 1913 created the city's *Empresa de Tubería de Hierro y Alcantarillado* (Iron Pipe and Sewer Company) and its 'autonomous board'. While the autonomy afforded to the corporation was initially controversial (El Espectador, 1914b), it was reinforced by an amendment to Article 1 of Accord 45 of 1914 through which the board of the newly renamed *Empresa de Acueducto* (Aqueduct Company) was created (El Espectador, 1914a). In fact, 'independence' would become so instrumental to *Empresa de Acueducto's* successful management in the 1910s that the city's other services were put under its authority at the end of the decade (López Bermúdez, 2000).

Although Medellín was in a better economic position than Bogotá, acquiring the necessary funds for municipalisation and service expansion proved difficult. To overcome the lack of international loans available during the war, and the limited capacity of local banks, the city issued the country's first public bonds through Accord 51 of 1916. Four sets of local government bonds, destined exclusively for water supply, were issued with a total value of CP\$400,000 (US\$8.4 million). Although the bonds were a

⁶ Bogotá Accord 15 of 1929.

success, by 1917 the amount was already insufficient for improvement works and the extension of infrastructure. In 1919, after two years of searching for credit, Accord 27 approved La Mutual Nacional – a loan of CP\$120,000 (US\$7.15 million) for the formation of a multi-utility corporation led by the *Empresa de Acueducto*. Through Accord 158 of 1918 the city's other local services were brought under the management of the *Empresa de Acueducto* to be led by its general manager and overseen by its board. The following year the arrangement was made official through Accord 57 of 1919. This created the *Empresas Municipales* (the Municipal Companies), which included seven companies: water supply, electricity, telephone, the municipal slaughterhouse, the market place, the animal market (under construction) and the tramway (under construction). The Accord emphasised the need for the new multi-utility corporation to be "independent from municipal government".

Despite the focus on independence, both the local government and the private sector retained important influence over the board of the *Empresas Municipales* throughout the first half of 20th century. Local council, for example, had final say over prices and set the initial tariffs through Accord 104 of 1919 and insured continued investment and infrastructure expansion, even during the debt crisis of the 1930s (López Bermúdez, 2000: 137), during which even the national government stepped in to help reduce their debt burden (Valencia Agudelo, 2010). At the same time, however, party politics dominated employment choices and board appointments (Livardo Ospina, 1966). With the passage of Accord 8 of 1930, parity between Liberal and Conservative Party sympathisers was required. Yet, it remained controversial. In 1936 the superintendent of the *Empresas* was forced to resign after hiring personnel aligned with the opposite political party. He defended the decision, stating that he had made it clear upon his appointment that hiring within the *Empresas* would be based on competence and not party affiliation (Livardo Ospina, 1966: 178).

The private sector was likewise involved, pushing its own interests. In fact, in Medellín, the private organisation *Sociedad de Mejoras Públicas* (Public Improvements Partnership) was so important in urban planning and development that the public and private sectors are said to have been indistinguishable in the first half of the 20th century (Botero Herrera, 1996). It was the city's industrialists, however, who were most active in steering the management and development of Medellín's multi-utility corporation. Their influence over the corporatised utility stemmed from the fact that they sometimes financed service development (especially electricity), were involved in the ownership and management of local banks and were able to act together through their guild, the *Asociación Nacional de Empresarios de Colombia* (ANDI – the National Association of Industrialists), formed in 1944 (Sáenz Rovner, 1992). Coltejer, a local textile giant, for example, contributed CP\$1.2 million (US\$9.1 million) to the Rio Grande hydroelectric project in 1945 (López Díez et al., 1998: 37). One of Coltejer's founders, Alejandro Echavarría Isaza, served as president of the Banco Hipotecario de Medellín and cofounded the Banco Alemán Antioqueño, today Banco Santander (Fransworth-Alvear, 2000: 50), while his son, Carlos J. Echavarría Misas, founded the ANDI as well as the Banco Industrial Colombiano.

In the first decades after municipalisation, highly dependent on reliable electricity for their factories, local industrialists worked to separate it from the other services of the *Empresas Municipales*. Their main concern was that it would be used to subsidise the less profitable services, such as water. In 1940 they were finally successful,⁷ creating the separate municipal electricity corporation, the *Empresa de Energía Eléctrica*. Created on 1 November 1940, this new corporation was "as autonomous from council as possible under existing law" (Livardo Ospina, 1966: 186) and made places on the board for an industry representative and one from the lending banks. Impressed with the apparent results of increased corporatisation, just two years later council approved Accord 87 of 1942 through which the other services were reunited, with electricity adopting its form of increased corporate autonomy. In

⁷ Accord 46 of 13 September 1940.

1947 private actors were granted further power over the board: Accord 47 allotted three board appointments to the council and one each to ANDI, the local commercial banks and the *Banco de la República*, Colombia's central bank.⁸ Accord 38 gave the board the authority to approve financial and investment decisions without consulting the council.

By 1950 the industrialists were working to create a new, more autonomous form of publicly owned utility corporation. In 1954 the vice president of ANDI, Diego Tobón Arbeláez, who was also a director of El Banco Comercial Antioqueño, and other representatives of Medellín's major industrial families travelled to Bogotá to promote utility corporatisation through the passage of Legislative Act 5 of 1954 (López Díez et al., 1998). Tobón Arbeláez was in fact the author of this legislation, which he discussed with representatives from the World Bank, accommodating their amendments, prior to presenting it before either Medellín's City Council or the National Legislature in Bogotá.⁹ The Legislative Act made it constitutionally possible to create 'autonomous entities' with their own legal status independent of their government owners. The independent status was reinforced through national Decree 1816 of 1955. Publicly owned corporations would no longer be under any government authority but completely decentralised and independent.

Medellín was the first city to create such a legally independent utility. It issued Accord 58 of 1955, creating the *Empresas Públicas de Medellín* (Public Companies of Medellín, hereafter the EPM). Through this reorganisation, despite pressure from the World Bank and the ANDI executive¹⁰ the electricity utility remained under the same management as water, sewage and telephones, creating a single, multi-utility corporation. Accord 58 underscored the importance of "providing this new entity with the legal individuality and administrative unity to administer services according to technical criteria" and of its remaining 'apolitical'. These principles were reiterated in Accord 375 of 1955, which further defined the EPM and its responsibilities.

The above work on the part of Medellín's industrial elite would affect utilities across the country. Bogotá reorganised and renamed its water supply corporation under the provisions of the new legislation via Accord 105 of 9 December 1955. As in Medellín, greater independence from the city council did not mean greater independence from private interests. The board of the newly established *Empresa de Agua y Alcantarillado de Bogotá* (Water and Sewage Company of Bogotá, hereafter EAAB) continued to be dominated by bank representation. Of the seven board members three were from private banks and a fourth was the manager of the *Banco de la República*. The others were appointed by the mayor (1) and council (2).

Improving access? The friction over cross-subsidisation

Upon municipalisation, the improvement and expansion of services depended on increasing revenues and reducing consumption, given limited treatment capacity. Those targeted were typically high-income households and industrial consumers. Reliable revenue was needed to obtain loans and finance service extension, as well as to improve and maintain service quality. The key measures implemented in both Bogotá and Medellín were metered billing and increased prices for wealthy households and businesses in order to cross-subsidise working class and 'popular' neighbourhoods. This was not always in concert with private interests. While private actors had pushed corporatisation they often attempted to stymie the efforts of local governments and utilities to implement cross-subsidisation as they were

⁸ The council chose the representatives from lists provided by the entities in question. The industry representative was converted to a representative from ANDI (formed in 1944) through Accord 66 of 18 August 1945.

⁹ Letter from Tobón Arbeláez to World Bank representative Alberto Waterston, dated 12 March 1955. In the author's possession.

¹⁰ Letters between Tobón Arbeláez and World Bank representative Alberto Waterston between 12 March and 30 April 1955. In the author's possession.

often the targets of tariff increases. In such cases, despite being corporatised, the utilities implemented progressive policies against the interests of their corporate overseers. To this end, the support of municipal government turned out to be crucial as opposed to detrimental.

In 1929, as the banks were reaffirming their long-term corporate control of EAAB, the city was grappling with a water supply crisis. It could not keep pace with consumption, some 310 l/day/household (EAAB, 1996: 253). In response, it began testing the introduction of meters, starting with 16 in 1926. Results in hand, it obtained a loan of CP\$300,000 in 1928 (US\$3.99 million), a portion of which was used to purchase 3200 water meters (EAAB, 1996: 254). It enacted Accord 25 of 1929, which included measures to curb privileges for unpaid water, to implement universal metering and increase rate collection. It stipulated a 50% surcharge on industrial, commercial and institutional ICI customers and ruled that all properties pay for water "with the exception of communal taps". The policy targeted high-income users, making an example of the acting mayor whose service was suspended for non-payment in 1931. When he reconnected illegally he was fined CP\$100 (US\$1480), plus one year's-worth of services, and was disconnected a second time (EAAB, 2003a: 517). This sanction was approved by the board of the EAAB, whose members argued, "the regulations must apply without any consideration of class".¹¹

The programme, however, proved difficult to enforce. As of 1938 only a small fraction of accounts were metered (El Tiempo, 1938). At that time renewed efforts were made: Accord 8 of 1939 enabled the utility to suspend services to ICI consumers failing to install a meter and to set differential fees for meter installation, with high-income neighbourhoods and the ICI sector paying above full cost, thereby subsidising installation for lower income users. Consumption tariffs were also progressive. The city set eight different price tiers: using property value assessments, those in higher value categories as well as the ICI sector paid rates above the full cost of services, subsidising households with lower assessments. The highest tier paid more than nine times that of the lowest tier for metered households (Table 1). Metering targeted users in high-income neighbourhoods and the ICI sector in order to extend services to working-class and low-income neighbourhoods (Gaítan, 1938; Cardeño, 2007). According to the utility, the increased revenue allowed it to qualify for the loans required to support infrastructure extension (EAAB, 2003b).

Table 1. Water tariffs in Bogotá, Accord 8 of 1939.

Property value (CP\$)	Metered properties		Unmetered properties
	Fixed fee up to 20 m ³ (CP\$)	Price per cubic meter above 20 m ³ (CP\$)	Fixed monthly fee (CP\$)
Up to 1000	0.90	0.04	1.00
1001 – 3000	1.00	0.05	1.20
3001 – 10,000	1.50	0.06	1.80
10,001 – 15,000	2.40	0.07	2.50
15,001 – 20,000	3.50	0.08	4.00
20,001 – 30,000	5.00	0.10	6.00
30,001 – 40,000	7.00	0.10	8.00
More than 40,000	8.50	0.10	10.00

Source: Assembled from Accord 8 of 1939.

¹¹ Acta 97, 11 junio de 1931. Libro de las actas de la junta directiva. Archivo de la EAAB. Cited in EAAB (2003a: 517).

The logic for metering was similar in Medellín, where the newly established municipal corporation began debating progressive consumption and property value-based tariffs in 1918 (El Espectador, 1918) and introduced water meters in 1923, starting with 1000 (Livardo Ospina, 1966). However, it was not until Accord 78 of 1938 that the city council approved the new regulations and tariffs, made meter installation mandatory (within a one-year compliance period) and required connected users to supply the utility with their property value assessment for the purposes of cross-subsidisation. According to Livardo Ospina (1966: 307), metering became necessary in the late 1930s due to the high volume of unaccounted for water, which surpassed 67%.

With Accord 78 of 1938 the utility introduced a cross-subsidised tariff programme involving 34 price tiers, exempting properties valued at less than CP\$500 (US\$4560) from metering. For properties valued at or below CP\$5000 (US\$45,560) connection could be repaid in 12 monthly instalments "to facilitate installations for the poor classes".¹² These programmes targeted a significant portion of Medellín's households. In 1926 38.8% of homes were valued at CP\$500 (US\$6480) or less and 82.3% at CP\$5000 (US\$64,700) or less (Berrío Marín, 2016).¹³ For metered households Accord 78 created 100 tiers in increments of CP\$1000 of property value from CP\$0-1000 to CP\$99,000-100,000. The monthly tariff for the highest tier was six times that of the lowest per cubic meter up to a certain level of consumption, after which all consumption was covered at CP\$0.01 per cubic meter (US\$0.16). For unmetered households the highest tier was charged nearly seventeen times the rate of the lowest.

As in Bogotá, these measures proved inadequate in meeting the utility's service delivery challenges. Medellín's population almost tripled between 1910 and 1930 and would more than quadruple again by 1960 (Robledo Correa et al., 1961). Such rapid urbanisation combined with poor loan conditions exacerbated the problems for service provision across Colombia's major cities (Ellis, 1953). In response, the EPM again reformed the tariff system following its increased corporatisation in 1955. This time the emphasis was placed on full cost recovery, including the extension of infrastructure. Through Resolution 1484 of 1958 the EPM implemented a connection fee, targeting large industrial users and exempting working-class and low-income neighbourhoods. Next, through Resolution 2222 of 1960, the utility increased consumption fees, targeting high-income groups.

Implementing and improving cross-subsidisation, however, proved controversial. Resistance came from higher income residents and industry. In 1964 Medellín's construction guild, Camacol, contested Resolution 1484 of 1958 in the Council of the State, the country's highest tribunal for issues of public administration, and had it revoked.¹⁴ This came precisely on the heels of a 1962 devaluation of the peso which was just beginning to be felt, "causing disorder" for water and sewage planning in the city (Livardo Ospina, 1966: 214). The EPM decided to implement the connection fee anyway and issued Decree 4 of 1966, with almost identical stipulations to those contained in Resolution 1484 of 1958. Three years later, in 1969, Camacol challenged Decree 4 of 1966 in the Council of the State and had it rescinded.¹⁵ City councillors from Medellín sided with the EPM. Defending cross-subsidisation before the Council of the State, they argued that differential prices were essential given the widespread poverty and high investment needs.¹⁶

Resistance to cross-subsidisation by business interests was also an issue in Bogotá. In the early 1980s the municipal water and sewage corporation, EAAB, was facing a financial crisis. In response, it sought to implement the connection fee that had been approved more than 30 years earlier through Accord 10

¹² Accord 78 of 1938, Article 2.

¹³ These values can be considered indicative of the situation in 1938. Between 1926 and 1938 the average assessed value of a home in Medellín increased by about 4%, from CP\$4851 in 1926 to CP\$5039 in 1938 (DANE, 1976).

¹⁴ Council of the State, Sentence 19, 1964.

¹⁵ Council of the State, Division of Administrative Litigation, 1969, Document 44 CE-SEC4-1969-12-10.

¹⁶ Ibid.

of 1949. At the same time it sought to forgive existing water debt in 497 low-income neighbourhoods. This drew an aggressive response from the Bogotá branch of the National Federation of Merchants, FENALCO-Bogotá, whose representatives argued that "distinctions cannot be made between developed and depressed urban areas, requiring the former to pay a connection fee, while forgiving the debt of the latter" (Cabrera, 1980). The guild further contended that the EAAB lacked the authority to forgive debt in low-income neighbourhoods (Cabrera, 1980). Succumbing to pressure from FENALCO-Bogotá, the city council went against the EAAB and successfully contested the connection fee in the departmental court of Cundinamarca (Arenas, 1980).

In the late 1980s the national government began to push a more neoliberal relationship around tariff setting and rate collection. In practice, however, utilities such as the EAAB and EPM, where cross-subsidisation was initiated, were not readily compliant. *Junta Nacional de Tarifas* (National Tariff Board) Resolution 046 of 1984 and Decree 951 of 1989 made rate collection and service suspension mandatory in cases of non-payment. Even the EPM, which emphasises its corporate ethos, did not generally suspend accounts in the 1980s as user debt accumulated (Gonzalez B., 1988). Law 142 of 1994, however, gave the Superintendence of Public Services (SSPD), established under the same law, the authority to liquidate and sell utility corporations in cases of non-compliance with a variety of measures including service suspension for non-payment. Service suspensions in Medellín reached 21% of connections for all services in 2003 (9% for water), declining slowly to around 12% in 2011 (Furlong, 2013). Law 142 also circumscribed the level of cross-subsidisation allowed between socioeconomic tiers, the effects of which were estimated to result in price increases of 213% (El Mundo, 1996a). These increases were disproportionately felt in the lowest income tiers (Fernández, 2004). In Bogotá while costs rose to 11% of income for the lowest tiers they decreased to 5% for the highest (Gilbert, 2007: 1568).

Yet, the results were not automatic, nor were they uncontested. According to Gilbert (2007), both federal and local politicians were reluctant to enforce the legislation, fearing a political backlash. In Medellín the general manager of the EPM lobbied against the reforms, expressing concern that they would severely affect people in the lowest income tiers, who comprised 75% of the city's population, and he predicted strikes and protests as a result (El Mundo, 1996d; Acebedo, 1996). The success of efforts to resist the pricing reforms is evidenced in the central government's multiple legislative attempts to enforce compliance. In a previous article we demonstrated how efforts to limit cross-subsidisation under Law 142 were gradually reversed between 1999 and 2011 through resistance on the part of municipalities and utilities to implement the reforms, as well as by a variety of citizen groups that brought forward challenges to the requirements before the constitutional court (Acevedo Guerrero, Furlong and Arias, 2016). In the present article, therefore, we focus on the efforts to privatise the municipal corporations under the same law. This is the subject of the next section.

Who should gain from commercialisation? The socialisation versus the privatisation of profits

In 1991 a new Colombian constitution was enacted, making it possible for private entities to own, manage and operate urban utilities. Then, through Law 142 of 1994, the government established the principles of 'free' market competition for water supply, seeking to undermine what it saw as the unfair advantage of the existing, publicly owned corporations in the sector. Through Article 17 it required that all water utilities be organised as shareholder corporations of public, mixed (with a maximum of 50% public ownership) or private ownership. Where public ownership was retained utilities were required to convert to an *Empresa Industrial y Comercial del Estado* (EICE – State Industrial and Commercial Company). This public option was a compromise obtained by the EPM, having unsuccessfully lobbied

congress to be excluded from the requirement of partial privatisation under Law 142 of 1994.¹⁷ The government also implemented a variety of measures to promote private sector participation: regulatory agencies were mandated to encourage it through CONPES documents 2775 of 1995 and 2852 of 1996. Grants were provided to private investors through the Business Modernization Program.

Notwithstanding longstanding corporatisation the programme proved difficult to implement. In Colombia's largest cities a range of groups worked to block the reforms. Half of Colombia's 20 largest cities managed to retain ownership of their local water corporation, leading the national regulatory commission for water supply, the CRA,¹⁸ to characterise the level of privatisation as "unsatisfactory" (Rozo Vengoechea, 2007: 100). In Bogotá, Medellín and Cali an existing tradition of utility autonomy and significant local mobilisation ensured that the utilities remained publicly owned (EAAB, 2003b; Vélez Álvarez, 2013; El Mundo, 1996b).¹⁹ At the Forum for Household Public Services held in Bogotá on 9 May 1996 city councillors from Medellín found allies among elected officials in Bogotá and Cali to help resist any level of privatisation.²⁰ Given the limited space we treat only the case of Medellín, as that of Bogotá has been examined extensively elsewhere (Colmenares Faccini and Mira Sanchéz, 2007; Vélez, 2005; Gilbert, 2007).

The debate divided the city of Medellín, attracting intense public attention (El Mundo, 1996i, c). Those who resisted were up against a powerful coalition of actors led by the mayor, Naranjo Pérez. He advocated mixed corporation with municipal ownership just below 90%, including the separation of telecommunications from the EPM to make a greater share available for privatisation. His Proposed Accord 132 of 1995 stipulated the sale of 11% of the EPM (consisting of the water, sewage, electricity and gas services) and up to 49% of the EPM-Telecommunications. The introduction of private capital was said to be necessary since deregulation meant existing utility corporations would no longer hold a monopoly position, which could lead to their atrophication. New and existing markets would have to be 'conquered', requiring 'special commercial strengths' to remain viable in globalised utility markets.²¹ It was argued, moreover, that given the "grave deficiencies" in education, health and security that were "beyond the capacity of the city", the EPM's "considerable" social investment had to be maintained. Thus, they would create the "Fondo de Desarrollo Social de Medellín" (Medellín Social Development Fund) using the revenue from partial privatisation. According to the mayor and his supporters, this constituted a "democratisation of ownership" by allowing "users and workers" to become owners of the EPM, "participating in decisions and administrative control as well as sharing in the profit".²²

To push the partial privatisation forward the mayor had powerful support and applied a range of tactics. His supporters included the general manager of the EPM, Mauricio Restrepo G.; the Grupo de Definición Empresarial (an EPM committee set up to study the issue), the then Governor of Antioquia and future president of Colombia, Álvaro Uribe, who gave a speech to the council on 14 June 1996 in support of the reform, a variety of private sector associations (including ANDI, the Chamber of Commerce and Camacol), an executive director of the World Bank in Latin America and former Minister of Mines and Energy, Jorge Eduardo Cock, and a coalition of 300 EPM employees (El Mundo, 1996f; El Colombiano, 1996a, b; El Mundo, 1996e).

¹⁷ Speech by Councillor William Nuñez David. Concejo de Medellín, Acta #210 de la Sesión ordinaria del lunes 10 de junio de 1996.

¹⁸ Comisión de Regulación de Agua Potable y Saneamiento Básico.

¹⁹ Interviews with utility staff and former federal regulators in Medellín.

²⁰ Concejo de Medellín, Acta #205 de la Sesión ordinaria del viernes 10 de mayo de 1996.

²¹ Speech by Mayor Naranjo Pérez. Concejo de Medellín, Acta #206 de la Sección ordinaria de instalación del lunes 3 de junio de 1996.

²² Ibid.

However, the city council remained divided over the plan – essentially along party lines. The minority of councillors, belonging to various conservative-aligned parties, who supported it argued that the EPM was in crisis.²³ The majority who were opposed, affiliated with the Liberals or parties of the left, faced multiple challenges and even threats in defending their position. In council meetings and newspaper reports they accused the mayor of a lack of transparency and of closing debate on other options for reform (particularly the EICE), as well as withholding information on the potential growth of the EPM as a public entity.²⁴ They denounced him for intimidation and bribery – particularly promises of political appointments or suggestions of dismissal but also briefcases of cash (El Mundo, 1996g),²⁵ and threats of violence.²⁶ On 29 June, it was reported that the mayor's cabinet reshuffle had left only five liberals in high positions as opposed to 26 conservatives (El Colombiano, 1996c). Councillors further called for an investigation into the financing of a public propaganda storm²⁷ involving the sudden appearance around the city of billboards stating "democratisation is not privatisation" and bearing the EPM and city logos.²⁸

Despite the significant forces in favour of partial privatisation, the EPM ultimately converted to an EICE, 100% owned by the City of Medellín. Here, the liberal and leftist councillors were supported by a range of local figures and groups, including former EPM managers, a former mayor and the EPM and municipal workers' unions (Asempúblicas), as well as a number of other unions, university groups and community associations (Jiménez Morales, 1997). They argued that the Social Development Fund was a risky and inefficient way to invest in social programmes, given that the funds would be subject to speculation on capital markets. Investing in the EPM, which already provided significant dividends for local social programmes, was deemed much safer.²⁹ As Councillor Nuñez David put it, "we have in fact had such a fund since 1955 [through ownership of the EPM]".³⁰ On the point of 'democratisation', many underscored the irony that this meant transferring something that was owned by all the citizens of Medellín to a few who could afford to purchase shares, that it would involve the concentration of shares in international companies or other wealthy interests³¹ and the contradiction between the goal of selling shares to workers and users and that of bringing in private capital and expertise to meet the emerging technical and market challenges.³² In terms of the need for depoliticised technical management, Councillor Díaz Mora countered that the history of good management at the EPM was a result of the work of local politicians.³³

While these councillors were against asset sale they were not against the commercialisation of the EPM, which was seen as a means of generating profits to fund local social programmes. This position is perhaps best summed up in Councillor Nuñez David's statement: "you can negotiate; you can make strategic alliances; you can do projects by concession. The only thing we oppose is the transfer of ownership".³⁴ Similarly, Councillor Zuluaga Ruiz expressed his relief that the EPM did not need to become a mixed corporation to engage in market expansion and partnerships with national and

²³ Speech by Councillor Andrés de Bedout. Concejo de Medellín, Acta #207 de la Sesión ordinaria del martes 4 de junio de 1996.

²⁴ Speech by Councillor William Nuñez David, Concejo de Medellín, Acta #207 op. cit.

²⁵ Speeches by Councillors Fabio Estrada Chica and Miryan Chamorro Caldera. Concejo de Medellín, Acta #210. op. cit.

²⁶ Concejo de Medellín, Acta #205 de la Sesión ordinaria del viernes 10 de mayo de 1996.

²⁷ Speech by Councillor Luis Carlos Díaz Mora. Concejo de Medellín, Acta #40 de la Sesión extraordinaria del 5 de abril 1995.

²⁸ Concejo de Medellín, Acta #208 de la Sesión ordinaria del miércoles 5 de junio de 1996.

²⁹ Speech by Councillor William Nuñez David, Concejo de Medellín, Acta #207, op. cit.

³⁰ Speech by Councillor William Nuñez David. Concejo de Medellín, Acta #208, op. cit.

³¹ William Nuñez David Acta 208, 210.

³² Fabio Villa Rodríguez: Acta 207.

³³ Concejo de Medellín, Acta #207. Op. cit.

³⁴ Concejo de Medellín, Acta #207. Op. cit.

international companies: "this is what we demand: that they [the EPM] go to new markets, that we improve our services, that we compete".³⁵ Of the EICE, Councillor Zuluaga Diaz stated "we are in love with this proposal; we can make it competitive".³⁶ Thus, the EICE embodied much of what local councillors wanted: it could reap profits from commercialisation but for social rather than private ends. Evidently, this was not simply an abstract matter but a strategic decision on the part of those who saw the potential for publicly owned utility corporations to become "independent municipal profit centre[s]" used to fund a variety of local services (Vinnari and Näsi, 2008: 25).

Only the mayor had the legal authority to propose an accord and the one he was willing to propose was that of conversion to a mixed company. Nevertheless, on 11 June 1996 four councillors defied the law by putting forward a proposal to convert the EPM into an EICE – the only public option available and that which would keep the EPM's profits in public hands. It was passed by the committee responsible for such issues and widely cheered at the council meeting that same day. Yet the mayor's minority supporters remained confident; Councillor de Bedout Jaramillo taunted the majority members, repeating that, despite their efforts, the one "who laughs last laughs best".³⁷ It would not be him laughing, however. Two weeks later, on 25 June, 17 of the 22 councillors voted in favour of the motion. The city comptroller accepted the motion, arguing that, given the requirements under Law 142, the EPM must be transformed into an EICE as the other options had failed to obtain approval. The comptroller argued, moreover, that Article 72 of the Internal Council Regulation gives councillors the right to amend the 'totality' of an Accord put forward by the mayor (Jiménez Morales, 1997). By 27 June Mayor Naranjo Pérez acquiesced and gave his approval (El Mundo, 1996h).

CONCLUSION

In terms of debates about utility corporatisation, the Colombian case is insightful. It places a policy typically associated with neoliberalisation in a longer historical trajectory, demonstrating the need to take a more nuanced view. In Colombia the corporatisation of public utilities was conducted in tandem with municipalisation in the 1910s rather than the 1980s or 1990s. In a context where local corruption, rapid urbanisation and extreme income inequality presented major barriers to service improvement, it was adopted because it was expected to protect private investment in public utility networks, by substituting political direction with technocratic and privately led control.

The story offers a messier picture of urban water supply development – and of corporatisation – over the course of the 20th century. In Colombia the municipalisation of services in no way meant the end of – or even a hiatus in – private sector involvement. Through corporatisation the private sector continued to direct service management, investment and regulation. Yet, the policies they promoted cannot be understood in strictly commercial terms. At the same time corporatisation did not mean an end to political direction and influence. When it came to cross-subsidisation, corporatised utilities and urban governments worked together against business interests to raise prices for and reduce consumption by wealthy households and the ICI sector. Hence, autonomy is neither absolute nor strictly about utility management being independent from the influence of local government. Autonomy from all types of powerful local interest is often necessary and hard won. Here autonomy emerges as under constant negotiation rather than as a fixed characteristic inherent to a corporate utility model.

Likewise, this is true of corporatisation itself. Its meaning and role in broader questions of urban governance is under constant negotiation. Positions and goals shift over time and depend on

³⁵ Concejo de Medellín, Acta #211. Op cit.

³⁶ Concejo de Medellín, Acta #211. Op cit.

³⁷ Concejo de Medellín, Acta 211, de la Sesión ordinaria del 11 de junio de 1996.

circumstances at multiple scales. What purposes corporatisation will serve is a constant struggle between government (local and national), local elites and service providers rather than inherent to the model itself. Corporatisation should be seen as a technology – both discursive and legal – whose rationalities, while apparently static, are contested and evolve over time. Put in a longer historical context, corporatisation can be understood as a 'negotiation space' for the multifaceted and often competing interests of public and private sector actors in services key to community safety and industrial growth under circumstances where neither has the resources to assert full control.

APPENDIX 1: LIST OF CITED LEGISLATION

National laws

- Law 4 of 1913. Congreso de la República. Sobre régimen político y municipal [On political and municipal regimes].
- Law 97 of 1913. Congreso de la República. Que da autorizaciones especiales a ciertos Concejos municipales [Which gives special attributions to certain city councils].
- Legislative Act 5 of 1954. Congreso de la República. Por el cual se aprueba una póliza de contrato [Which approves a contracting policy]
- Law 142 of 1994. Congreso de la República. Por la cual se establece el régimen de los servicios públicos domiciliarios [By which the system of public services is established].
- Law 226 of 1995. Por la cual se desarrolla el artículo 60 de la Constitución Política en cuanto a la enajenación de la propiedad accionaria estatal, se toman medidas para su democratización y se dictan otras disposiciones.

Executive decrees

- Decree 1816 of 1955. Presidencia de la República.
- Decree 4 of 1966. Empresas Públicas de Medellín.
- Decree 394 of 1987. Presidencia de la República.
- Decree 951 of 1989. Presidencia de la República. Por el cual se establece el reglamento general para la prestación de los servicios de acueducto y de alcantarillado en todo el territorio nacional [By which the general regulations for water supply and sanitation are established].

Accords: City Council of Bogotá

- Accord 15 of 1914.
- Accord 57 of 1924. Por el cual se organiza la administración de las empresas municipales [By which the management of public utilities is organized].
- Accord 15 of 1929. Por el cual se aprueba un contrato [By which a contract was approved].
- Accord 25 of 1929.
- Accord 8 of 1939. Por el cual se modifican las tarifas del Acueducto Municipal [By which water tariffs are modified].
- Accord 105 of 1955.
- Accord 6 of 1995.

Accords: City Council of Medellín

- Accord 127 of 1913. Por medio del cual se crea la Junta Autónoma para la empresa de Tubería de Hierro y Alcantarillado [By which the Municipal Water Utility is created].

Accord 45 of 1914.

Accord 51 of 1916.

Accord 159 of 1917.

Accord 158 of 1918.

Accord 27 of 1919

Accord 57 of 1919.

Accord 104 of 1919.

Accord 8 of 1930.

Accord 78 of 1938. Por el cual se aprueban nuevas tarifas y reglamentos para la prestación del servicio de acueducto. [Through which new tariffs and regulation for the water and sewer service are approved].

Accord 46 of 1940.

Accord 87 of 1942.

Accord 66 of 1945. Por el cual se modifica el Acuerdo 87 de 1942 sobre organización de las Empresas y se fusionan unas juntas [Through which the Accord 87 of 1942 on the organisation of the Enterprises is modified and certain boards are amalgamated].

Acuerdo 87 (October 28) 1942.

Accord 38 (September 10) of 1947.

Acuerdo 47 (August 6) of 1947.

Accord 58 of 1955.

Accord 375 of 1955. Estatutos del Establecimiento público autónomo 'Empresas Públicas de Medellín' [Statutes of the autonomous public utility 'Empresas Públicas de Medellín'].

Accord 69 of 1997. Concejo Municipal de Medellín.

Resolutions

Resolution 1484 of 1959. Ministerio de Salud Pública. Por la cual se aprueba el Decreto número 3 de abril 8 de 1959, de la Junta Directiva de las Empresas Públicas de Medellín [By which Decree 3 April 8, 1959 issued by the Board of Directors of the Public Enterprises of Medellín is approved].

Resolution 2222 of 1960. Empresas Públicas de Medellín.

Resolution 046 (July 26) of 1984. Junta Nacional de Tarifas.

Resolution 04 of 1994. Comisión de Regulación de Agua Potable y de Saneamiento Básico. CRA. Por la cual se establecen los niveles máximos de consumos básicos del servicio de agua potable [By which the highest levels of subsistence consumption of water are established].

Other

Colombian Constitution, 1991. Asamblea Nacional Constituyente.

Sentence 19 December 1964. Consejo de Estado.

Document 44 CE-SEC4-1969-12-10, 1969. Consejo de Estado, Division of Administrative Litigation.

CONPES document 2775 of 1995. Consejo Nacional de Política Económica y Social, Departamento Nacional de Planeación.

CONPES document 2852 of 1996. Consejo Nacional de Política Económica y Social, Departamento Nacional de Planeación.

BIBLIOGRAPHY

- Acebedo, J.C. 1996. Paraguas contra la tempestad tarifaria. *El Mundo*. 20 noviembre 1996.
- Acevedo Guerrero, T.; Arias, J. and Furlong, K. 2015. Regulacion del agua en el contexto de un estado debil: Colombia 1909-2013. Presentacion de la base de datos.
- Acevedo Guerrero, T.; Furlong, K. and Arias, J. 2016. Complicating neoliberalization and decentralization: the non-linear experience of Colombian water supply 1909-2012. *International Journal of Water Resources Development* 32(2): 172-188.
- Arenas, I. 1980. Fallo de la Corte sobre las cuotas de conexión. *El Tiempo*. October 15 1980.
- Assies, W. 2003. David versus Goliath in Cochabamba – Water rights, neoliberalism, and the revival of social protest in Bolivia. *Latin American Perspectives* 30(3): 14-36.
- Bakker, K. 2007. The 'commons' versus the 'commodity': Alter-globalization, anti-privatization and the human right to water in the Global South. *Antipode* 39(3): 430-455.
- Berrío Marín, J.A. 2016. Noventa años de historia de catastro Medellín. In *IX Simposio Iberoamericano de Catastro*. Medellín.
- Bijker, W.E. and Law, J. 1992. General introduction. In Bijker, W.E. and Law, J. (Eds), *Shaping technology/building society: Studies in sociotechnical change*, pp. 1-14. Cambridge, MA: MIT Press.
- Botero Herrera, F. 1996. *Medellín 1890-1950: Historia urbana y juego de intereses*. Medellín: Editorial Universidad de Antioquia.
- Budds, J. and McGranahan, G. 2003. Are the debates on water privatization missing the point? Experiences from Africa, Asia and Latin America. *Environment and Urbanization* 15(2): 87-113.
- Buitrago Mora, G. 1978. Historia financiera 1914 1978. Bogotá: Empresa de Acueducto y Alcantarillado de Bogotá, D.E.
- Cabrera, G. 1980. En el consejo de la ciudad: Un intenso debate sobre las cuotas de conexión. *El Tiempo*. August 13 1980.
- Cardeño, F. 2007. *Historia del desarrollo urbano del centro de Bogotá*. Bogotá: Alcaldía Mayor de Bogotá.
- Christensen, J.G. and Pallesen, T. 2001. The political benefits of corporatization and privatization. *Journal of Public Policy* 21(3): 283-309.
- Colmenares Faccini, R. and Mira Sánchez, J.C. 2007. Paradojas del agua en Colombia. Privatización y alternativas públicas (Water paradoxes in Colombia: privatization and public alternatives). In Darío Correa, H. (Ed), *Colombia: Un futuro sin agua?*, pp. 13-25. Bogotá: Corporación Ecofondo, Ediciones desde abajo, y Foro Nacional Ambiental.
- Consejo de Bogotá. 1912. Exposición que hace el Concejo Municipal al Congreso de 1912. Bogotá: Arboleda & Valencia Editores. www.banrepcultural.org/blaavirtual/medioambiente/exposicion-que-hace-el-consejo-municipal-de-bogota-al-congreso-de-1912 (accessed 1 May 2017)
- Cruz, N.F.; Marques, R.C.; Marra, A. and Pozzi, C. 2014. Local mixed companies: The theory and practice in an international perspective. *Annals of Public and Cooperative Economics* 85(1): 1-9.
- DANE. 1976. Medellín en cifras. Ciudad tricentenaria 1675-1975. Bogotá: Departamento Administrativo Nacional de Estadística (DANE) Regional de Medellín.[LD 70113.
- de Laet, M. and Mol, A. 2000. The Zimbabwe Bush Pump: Mechanics of a fluid technology. *Social Studies of Science* 30(2): 225-263.
- Dean, M. 1999. *Governmentality: Power and rule in modern society*. London: Sage.
- EAAB. 1996. *El agua en la historia de una ciudad*. Bogotá: Empresa de Acueducto y Alcantarillado de Bogotá.
- EAAB. 2003a. *El agua en la historia de Bogotá 1538-1937*. Bogotá: Villegas Editores.
- EAAB. 2003b. *El agua en la historia de Bogotá 1986-2003*. Bogotá: Villegas Editores.
- El Colombiano. 1912. La Cronica. *El Colombiano*. 20 febrero 1912.
- El Colombiano. 1996a. Gremios económicos no se ponen de acuerdo. *El Colombiano*. 13 febrero 1996a.
- El Colombiano. 1996b. Los cambios en EPM. *El Colombiano*. 19 junio 1996b.

- El Colombiano. 1996c. Sectarismo conservador en la Alcaldía. *El Colombiano*. 29 junio 1996c.
- El Espectador. 1913a. Alarmante! *El Espectador*,. 14 febrero 1913a.
- El Espectador. 1913b. El Municipio. *El Espectador*,. 2 octubre 1913b.
- El Espectador. 1913c. El Tifo: Entrevista con el Dr. Gabriel Toro Villa. *El Espectador*,. 12 septiembre 1913c.
- El Espectador. 1913d. Sin aguas. *El Espectador*,. 24 marzo 1913d.
- El Espectador. 1914a. Acuerdo aprobado. *El Espectador*. 15 junio 1914a.
- El Espectador. 1914b. El consejo. *El Espectador*. 2 febrero 1914b.
- El Espectador. 1918. En el consejo. *El Espectador*. 20 septiembre 1918.
- El Espectador. 1929a. El desbarajuste de las empresas municipales. *El Espectador*. June 4 1929a.
- El Espectador. 1929b. Entrega de las empresas municipales a los bancos. *El Espectador*. 23 agosto 1929b.
- El Mundo. 1996a. Desmonte de subsidios será gradual. *El Mundo*. 20 junio 1996a.
- El Mundo. 1996b. El viernes, marcha por la defensa de las EPM. *El Mundo*. 12 junio 1996b.
- El Mundo. 1996c. Empresas publicas ya es un asunto de todos. *El Mundo*. 19 junio 1996c.
- El Mundo. 1996d. En suspenso desmonte de subsidios. *El Mundo*. 21 mayo 1996d.
- El Mundo. 1996e. Gobernador respalda la propuesta del Alcalde. *El Mundo*. 12 junio 1996e.
- El Mundo. 1996f. Que sea de Economía Mixta: empleados. *El Mundo*. 14 junio 1996f.
- El Mundo. 1996g. Revista Metro. El Consejo dice que va a votar. *El Mundo*. 22 junio 1996g.
- El Mundo. 1996h. Si es legal, el Alcalde lo sanciona. *El Mundo*. 27 junio 1996h.
- El Mundo. 1996i. Si nos equivocamos, que seamos todos. *El Mundo*. 19 junio 1996i.
- El Nuevo Tiempo. 1925. El acueducto de Bogotá. *El Nuevo Tiempo*. April 15 1925.
- El Tiempo. 1911a. El Acueducto y la Prensa Asociada. *El Tiempo*. February 9 1911a.
- El Tiempo. 1911b. La Municipalidad. *El Tiempo*. March 31 1911b.
- El Tiempo. 1912a. Comunica á la Alcaldía Municipal la Dirección de Higiene y Salubridad. *El Tiempo*. January 18 1912a.
- El Tiempo. 1912b. El empréstito municipal y el gobierno. *El Tiempo*. 1 febrero 1912b.
- El Tiempo. 1912c. El lo que va corrido del presente año la epidemia de tifo. *El Tiempo*. August 5 1912c.
- El Tiempo. 1912d. En su sesión. *El Tiempo*. 26 enero 1912d.
- El Tiempo. 1929a. Ante el desastre municipal. *El Tiempo*. June 5 1929a.
- El Tiempo. 1929b. La ciudad de pie. *El Tiempo*. June 7 1929b.
- El Tiempo. 1929c. La imponente manifestación de ayer contra la rosca nefanda. *El Tiempo*. June 7 1929c.
- El Tiempo. 1929d. La pugna entre los gerentes y el alcalde. *El Tiempo*. June 5 1929d.
- El Tiempo. 1938. El municipio recibe la planta de Vitelma. *El Tiempo*. December 4 1938.
- Ellis, C.A. 1953. *Public utilities in Colombia*. New York: United Nations Technical Assistance Programme.
- Fernández, D. 2004. Colombia: Desarrollo económico reciente en infraestructura balanceando las necesidades sociales y productivas de infraestructura – Informes de base, sector agua potable. Washington, DC: World Bank – Finance, Private Sector and Infrastructure Unit, Latin America and the Caribbean. Septiembre 1.
- Fransworth-Alvear, A. 2000. *Dulcinea in the factory: Myths, morals, men, and women in Colombia's industrial experiment, 1905-1960*. Durham and London: Duke University Press.
- Furlong, K. 2010. Neoliberal water management: Trends, limitations, reformulations. *Environment and Society: Advances in Research* 1(1): 46-75.
- Furlong, K. 2013. The Dialectics of equity: Consumer citizenship and the extension of water supply in Medellín, Colombia. *Annals of the Association of American Geographers* 103(5): 1176-1192.
- Furlong, K. 2015. Water and the entrepreneurial city: The territorial expansion of public utility companies from Colombia and The Netherlands. *Geoforum* 58: 195-207.

- Furlong, K. 2016. The public shareholder: The commercialization and internationalization of publicly owned utility corporations. *Utilities Policy* 40: 104-106.
- Gaceta Republicana. 1912. Por la higiene pública. *Gaceta Republicana*. July 31 1912.
- Gaitán, L.A. 1938. Urbanizaciones en la Ciudad de Bogotá. In Fundación el Libro Total (Ed), *Homenaje del Cabildo a la Ciudad en su IV Centenario 1538-1938*, pp. 837-850. Bogotá: Ediciones El Concejo.
- Gallini, S.; Felacio, L.; Agredo, A. and Garcés, S. 2014. The city's currents: A history of water in 20th-century Bogotá. In *Virtual Exhibitions*. Environment & Society Portal: Rachel Carson Center for Environment and Society.
- García Estrada, R.d.J. 2000. El Concejo en el tránsito de Villa de la Candelaria a Ciudad de Medellín, 1900-1919. In García Estrada, R.d.J. (Ed), *El Concejo de Medellín : Protagonista del desarrollo de la capital antioqueña 1900-1999*, pp. 39-86. Medellín: Consejo de Medellín.
- Gilbert, A. 2007. Water for All: How to combine public management with commercial practice for the benefit of the poor? *Urban Studies* 44(7): 1559-1579.
- Giraldo, F. 1911. Municipio de Bogota: Informe del Personero Dr. Francisco Giraldo VI. *El Tiempo*. 6 de diciembre 1911.
- Gonzalez B., L.M. 1988. Algunas consideraciones sobre las tarifas del acueducto y el alcantarillado. *Revista de las Empresas Públicas de* 10(3-4): 233-241.
- Grossi, G. and Reichard, C. 2008. Municipal corporatization in Germany and Italy. *Public Management Review* 10(5): 597-617.
- Hall, D. and Lobina, E. 2010. Water companies in Europe 2010. London: Public Services International Research Unit (PSIRU), University of Greenwich. September.
- Henderson, J.D. 2001. *Modernization in Colombia: The Laureano Gómez Years, 1889-1965*. Gainesville: University Press of Florida.
- Hetherington, K. 2011. *Guerrilla auditors: The politics of transparency in neoliberal Paraguay*. Durham: Duke University Press.
- Hoorens, D.; Verdier, A. and Marinez, S. 2004. *Local public companies in the 25 countries of the European Union*. Paris: Dexia.
- Jiménez, J. and Valderrama, A. 2004. *El Agua en Bogotá*. Bogotá: Universidad de los Andes.
- Jiménez Morales, G. 1997. *Las intocables EPM*. Medellín: Concejo de Medellín.
- Krause, M. 2009. *The political economy of water and sanitation*. New York: Routledge.
- Latour, B. 2010. *The making of the law: An ethnography of the Conseil d'État*. Cambridge: Cambridge University Press.
- Law, J. and Bijker, W.E. 1992. Postscript: Technology, stability, and social theory. In Bijker, W.E. and Law, J. (Eds), *Shaping technology/building society: Studies in sociotechnical change*, pp. 290-308. Cambridge, MA: MIT Press.
- Lawhon, M.; Ernstson, H. and Silver, J. 2014. Provincializing urban political ecology: Towards a situated UPE through African urbanism. *Antipode* 46(2): 497-516.
- LeGrand, C.C. 1986. *Frontier expansion and peasant protest in Colombia: 1830-1936*. Albuquerque: University of New Mexico Press.
- Livardo Ospina, E. 1966. *Una vida, una lucha, una victoria: Monografía histórica de las empresas y servicios públicos de Medellín*. Medellín, Colombia: Empresas Públicas de Medellín.
- López Bermúdez, A. 2000. Un concejo gerencial para consolidar el proyecto industrializador, 1920-1947. In García Estrada, R.d.J. (Ed). *El Concejo de Medellín: Protagonista del desarrollo de la capital antioqueña 1900-1999*, pp. 101-166. Medellín: Consejo de Medellín.
- López Díez, J.C.; Aristizábal Gil, L.F.; Arias Jaramillo, A. and Tobón Giraldo, C.A. 1998. El Modelo racionalizador en la gestión de los servicios públicos: El case de las Empresas Públicas de Medellín, Administración. Universidad EAFIT, Medellín.
- Márquez V.; J.H. and Santa Z.; J.E. 2013. Agua y salud en la configuración del espacio urbano de Medellín (1886-1913). *Transhumante: Revista Americana de Historial Social* 2: 106-134.
- McDonald, D. (Ed). 2014. *Rethinking corporatization and public services in the global south*. New York: Zed Books.

- McDonald, D. 2016. To corporatize or not to corporatize (and if so, how?). *Utilities Policy* 40: 107-114.
- McDonald, D. and Ruiters, G. (Eds). 2012a. *Alternatives to privatization: Public options for essential services in the Global South*. Cape Town: HSRC Press.
- McDonald, D.A. and Ruiters, G. (Eds). 2012b. *Alternatives to privatization: Public options for essential services in the Global South*. Cape Town: HSRC Press.
- McInnes, P. 2005. Entrenching Inequalities: The impact of corporatization on water injustices in Pretoria. In McDonald, D.A. and Ruiters, G. (Eds), *Age of commodity : Water privatization in Southern Africa*, pp. 111-132. London: Earthscan.
- Miller, P. and Rose, N. 2008. *Governing the present: Administering economic, social and personal life*. Cambridge: Polity.
- Paquet, G. 1997. Alternative service delivery: Transcending the practices of governance. In Ford, R. and Zussman, D. (Eds), *Alternative service delivery: Sharing governance in Canada*, pp. 31-58. Toronto, ON: KPMG Centre for Government Foundation & Institute of Public Administration of Canada (IPAC).
- Parnell, S. and Robinson, J. 2012. (Re)theorizing cities from the Global South: Looking beyond neoliberalism. *Urban Geography* 33(4): 593-617.
- Pollitt, C. and Bouckaert, G. 2000. *Public management reform: A comparative analysis*. Oxford & New York: Oxford University Press.
- Robledo Correa, E.; Sanín Echeverri, J.; Echavarría Villegas, L.; Mesa Jaramillo, A.; Aguirre Ceballos, A.; Molina, C.I.; Lalinde Botero, L.; Hermano Daniel; Zapata Restrepo, M.; Saldarriga Arcila, J.; Arce Aragón, E. and Rincón, F. 1961. *Antioquia: Tierra de trabajo y progreso*. Medellín: Bonnier-Molina Ltda.
- Rose, N. 1996. Governing "advanced" liberal democracies. In Barry, A.; Osborne, T. and Rose, N. (Eds), *Foucault and political reason: Liberalism, neo-liberalism and rationalities of government*, pp. 37-64. London: UCL Press.
- Rozo Vengoechea, J. 2007. Participación privada y desarrollo empresarial en los servicios de acueducto y alcantarillado en Colombia: Cuándo, cómo y dónde? *Regulación de Agua Potable y Saneamiento Básico* 13: 87-115.
- Sáenz Rovner, E. 1992. *La ofensiva empresarial: Industriales, políticos y violencia en los años 40 en Colombia*. Bogotá: Tercer Mundo Editores & Ediciones Uniandes.
- Schwartz, K. 2008. The New Public Management: The future for reforms in the African water supply and sanitation sector? *Utilities Policy* 16: 49-58.
- Scott, J.C. 1998. *Seeing like a state: How certain schemes to improve the human condition have failed*. New Haven, CT: Yale University Press.
- Sheil, C. 2000. *Water's fall: Running the risks with economic rationalism*. Annandale, AU: Pluto Press.
- Smith, L. 2004. The murky waters of second wave neoliberalism. *Geoforum* 35: 375-393.
- Smith, L. 2006. Neither public nor private: Unpacking the Johannesburg water corporatization model. United Nations Research Institute for Social Development.
- Thynne, I. 1994. The Incorporated Company as an instrument of government: A quest for a comparative understanding. *Governance - An International Journal of Policy Administration and Institutions* 7(1): 59-82.
- Tsanga Tabi, M. 2006. Entre client-centrisme et droit à l'eau: Le dilemme posé par l'utilisateur non solvable dans la gestion des services publics marchands en France. *Politiques et Management Public* 24(4): 69-89.
- Valencia Agudelo, G.D. 2010. Cinco hitos institucionales que configuraron la historia de los servicios públicos domiciliarios en Medellín, 1890-2010. *Estudios de Derecho* LXVII(150): 136-156.
- Vélez Álvarez, L.G. 2013. Evolución de las empresas de agua y saneamiento de Medellín y Cali en Colombia: ¿Vidas paralelas? Bogotá: Banco Interamericano de Desarrollo. July 2013.[# IDB-TN-517.
- Vélez, H. 2005. Servicios públicos en Colombia: Cuestión de democracia. *Por un model público de agua: Triunfos, luchas y sueños*, pp. Armilla, Spain: El Viejo Topo.
- Vinnari, E.M. and Näsi, S. 2008. Creative accrual accounting in the public sector: 'Milking' water utilities to balance municipal budgets and accounts. *Financial Accountability & Management* 24(2): 97-116.
- Walsh, K. 1995. *Public services and market mechanisms: Competition, contracting and the New Public Management*. New York: St. Martin's Press.

- Warner, M.E. and Hefetz, A. 2008. Managing markets for public service: The role of mixed public-private delivery of city services. *Public Administration Review* 68(1): 155-166.
- Warner, M.E. and Hefetz, A. 2012. Insourcing and outsourcing. *Journal of the American Planning Association* 78(3): 313-327.
- Wettenhall, R. 2001. Public or Private? Public Corporations, Companies and the Decline of the Middle Ground. *Public Organization Review* 1(1): 17-40.
- Wilkins, J.K. 2002. Conceptual and practical considerations in alternative service delivery. Paper read at Biennial Conference of the Commonwealth Association of Public Administration and Management, Sep, at Glasgow, Scotland.

THIS ARTICLE IS DISTRIBUTED UNDER THE TERMS OF THE CREATIVE COMMONS *ATTRIBUTION-NONCOMMERCIAL-SHAREALIKE* LICENSE WHICH PERMITS ANY NON COMMERCIAL USE, DISTRIBUTION, AND REPRODUCTION IN ANY MEDIUM, PROVIDED THE ORIGINAL AUTHOR(S) AND SOURCE ARE CREDITED. SEE [HTTP://CREATIVECOMMONS.ORG/LICENSES/BY-NC-SA/3.0/LEGALCODE](http://creativecommons.org/licenses/by-nc-sa/3.0/legalcode)

